

Weather Note

LUMINOSITY ACCOMPANYING ST. LOUIS TORNADO—FEBRUARY 10, 1959

BERNARD VONNEGUT

Arthur D. Little, Inc., Cambridge, Mass.
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Newspaper accounts of the 1959 St. Louis tornado which occurred at about 2:20 a.m. have described various luminous phenomena that accompanied this tornado. For example, one observer was quoted as saying, "I saw a blue flash of light and I heard a terrible roar." Another observer stated, "There was a terrific glow of light as if a cloud was illuminated, and there was a sound like the roar of a tremendous automobile racing its engine."

These accounts appear similar to Montgomery's¹ description of the Blackwell, Okla. tornado of May 25, 1955. He stated, "The fire up near the top of the funnel looked like a child's Fourth of July Pinwheel."

In an effort to learn more about the details of this luminosity, we wrote a letter to the editor of the *St. Louis Post Dispatch* requesting information from readers who might have witnessed such phenomena. Over a dozen people responded to this request and sent in letters describing their observations. The following accounts were taken verbatim from some of the letters that were sent in describing the February 10 tornado:

1. "The approach of the St. Louis 2:20 a.m. tornado was a continuous illumination not *streaks* or *strokes* as in an electric storm.

"The continuous sort of flat lightning is always an indication of wind and hail.

"I have observed such performances for a number of years, not to say that just when and where it would strike, but one can tell about that there is something coming. Continuous illuminated cloud is what I saw again from 1:30 a.m. till 2:20 a.m. when soon I heard what had happened, passing overhead, but 1½ miles to the south of where I am located, I heard the roar, a sound as if a 100-car freight train was passing by." (Martin Maurer)

2. "The lightning was not close nor did it occur often. But there were two freak shows which I had never seen before.

The first in the southeast as a brilliant pink which lasted a few seconds, followed by a pale green which also lingered. It was not a streak but more like a sunset effect and clouds were outlined against it.

"The second was in the northeast and entirely different being a flame-like flare right up from the horizon just as though it were from a burning building. It was followed by a second one just like it and in the same general direction." (Miss Genevieve Plummer)

3. "The night of the storm I awoke at 2 o'clock. I thought it seemed to me it was raining hard so I arose and looked out. At once I saw a big ball of fire in the sky to the east. It looked different kind of bright yellow and then there was a long flash not like usual but very bright and to me it looked like the shape of a broad sword not slim like the flashes I have seen before." (Mrs. M. Hatch)

4. "On the night of the storm I woke as the result of heavy thunder (apparently about 2 a.m. or shortly after). The thunder stopped and a *very* heavy rain came against the west windows at about the strength of a strong fire hose. The windows did not break. After only a minute or two the rain stopped suddenly and a peculiar very rapid lightning flashing began flashing through the west window. My windows were covered by a transparent mesh-type curtain (glass fiber) so that I could see the light but their translucency did not allow me to see more and I did not realize there was more to be seen than an ordinary bad thunderstorm.

"This lightning flashing was very rapid—perhaps two or three flashes per second and not as brilliant as the usual big flash preceding a thunderclap. This flashing passed the west windows moving rapidly north and in a few moments was passing the north window going northeasterly (presumably—at least it passed by each window in about the same way. Total time of passage past both windows perhaps 3–4 min.). I don't recall hearing any sound as this rapid flashing was going on, but my windows were closed, and I was probably in a half-sleep condition." (L. B. Spiess)

¹Floyd C. Montgomery, *Monthly Weather Review*, May 1955, vol. 83, No. 5, p. 109.